

zomos had better remained unnamed where many students had left it.

A NEW SUBSPECIES OF PECTEN (PLAGIOCTENIUM) GIBBUS (LINNÉ)

BY GILBERT GRAU

Several years ago a number of specimens of *Pecten gibbus* were received from Mr. R. C. Spencer, who had collected them 2 miles off Port Royal, South Carolina. It was immediately apparent that they differed considerably from typical *gibbus* but it was felt advisable to secure more examples of the form before attempting to arrive at any conclusion regarding its status. As the result of subsequent collecting by Mr. Spencer in the same area more than 60 specimens have been received, ranging in height from 7 to 33 mm.

For comparative study the author used a series of 104 specimens of *P. gibbus* in his collection, ranging from 10 to 51 mm. in height and collected at various localities on the east and west coasts of Florida, at Campeche, Yucatan, and at Gambia, west Africa. Thorough comparison of this series with the South Carolina series proved the latter to be quite distinct and readily separable from the typical.

A somewhat similar fossil species, *P. (Plagioctenium) comparilis jacksonensis* Mansfield (Upper Miocene of Florida), was also compared with the Carolina specimens and was found to differ in a number of respects.

Having completed the foregoing study, the author is convinced that the South Carolina form is deserving of subspecific rank, and a description of the new subspecies follows.

PECTEN (PLAGIOCTENIUM) GIBBUS CAROLINENSIS subsp. nov. Plate 1, figs. 2, 3, 4, 5, 7.

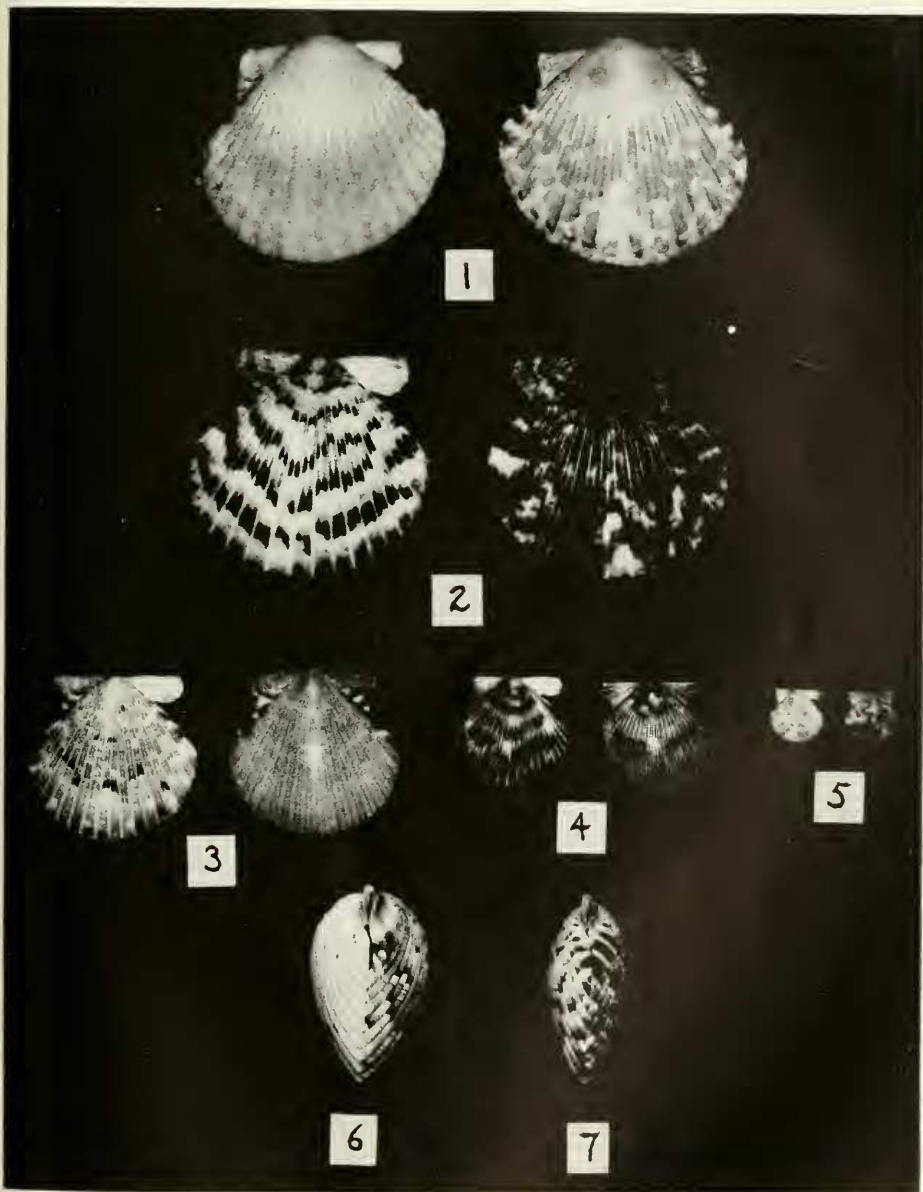
Shell of moderate size, equilateral, equivalve and moderately convex, with fairly long hinge line. Anterior auricle of right valve rather strongly produced and having 4 riblets. Fine concentric lamellae in interspaces and crossing riblets, often producing scales on apices. Distinct byssal sinus and ctenolium

consisting of 5 or 6 teeth. Posterior auricle moderately produced and having 6 or 7 riblets. Fine lamellae in interspaces of young shells; in larger specimens lamellae cross riblets but do not form scales. External hinge margin of right valve irregularly scaled, but not prominently. Anterior and posterior auricles of left valve having 5 to 7 riblets; concentrically lamellated but not scaled. Disc of both valves having 18 to 21 ribs. On right valve ribs are rather broad and rounded, with distinct concentric lamellae (much stronger than on auricles) in interspaces. Ribs on left valve narrower, steeply rising and somewhat flattened on top. Intercostal lamellae more numerous than on right valve, and in juvenile specimens present in interspaces only. As shell reaches altitude of 20 to 24 mm. lamellae continue across ribs. Umbones not gibbous, tapering to point and, in left valve only, projecting slightly over hinge line. Coloration: left valve ranging from reddish brown to pale brown, variously mottled with white and deep brown. Right valve paler and often predominantly white; mottled with colors corresponding to those of left valve; anterior auricle always white.

The holotype, in the author's collection, was taken at a depth of 80 feet, 2 miles off Port Royal, South Carolina, by Mr. R. C. Spencer. It measures: height 33 mm.; length 34 mm.; diameter 14 mm. Paratypes have been deposited in the United States National Museum and the California Academy of Sciences, San Francisco.

The subspecies is easily distinguishable from typical *gibbus*, the following constant features being the chief differences: valves much less convex, interspaces distinctly lamellated, byssal and posterior sinus pronounced and umbones pointed and not inflated. As an indication of relative tumidity (the most immediately apparent distinction) an average specimen of *P. gibbus* measuring 33 mm. in height, has a diameter of 19.5 mm., while the holotype of the subspecies, of the same height, has a diameter of only 14 mm.

The author is grateful to Mr. Spencer for so generously supplying specimens, to Mr. Herman Gunter, of the Florida Geological Survey, for the loan of fossil material, and, in connection with research in general on the family Pectinidae, to Mr.



FIGS. 1, 6, *Pecten gibbus* L., FIGS. 2, 3, 4, 5, 7, *Pecten gibbus carolinensis* Grau.